IMPACT OF FINANCIAL LEVERAGE ON FINANCIAL PERFORMANCE, FIRM VALUE AND SHAREHOLDERS' RETURN OF SELECT MANUFACTURING COMPANIES IN INDIA

Ph.D SYNOPSIS

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INTRODUCTION

Indian manufacturing Industry is playing a vital role in the country's overall economic development. The Indian Industry accounts for 25.92 per cent of the country's GDP contribution by estimating Rs. 46.44 lakh crore of Gross Value Added (GVA). It is categorised into four sectors namely Mining & quarrying; Manufacturing; Electricity, Gas, Water supply & other utility services and Construction. Among these, the Manufacturing sector (14.43 per cent) contributes a higher percentage of the country's GDP - [Source: Ministry of Statistics and Programme Implementation, 17 June 2021 (statisticstimes.com)]. India has a great scope and potential in manufacturing (The Hindu Businessline, 3 January 2022)**.** Eminent Economist and former chairman of the National Statistical Commission Pronab Sen has the opinion that "A greater focus must be on manufacturing, as it has very strong backward linkages with immense employment potential" (Financial express- March 11, 2022).

IM Pandey defines that “The use of the fixed-charges sources of funds, such as debt and preference capital along with the owners’ equity in the capital structure, is described as financial leverage or capital gearing or trading on equity”. In Financial Management, favourable Leverage refers to the situation where the Earnings Before Interest and Tax (EBIT) are comparatively higher than the fixed return charge (fixed interest and fixed dividend on preference shares).

The proper handling of financial management ensures any business organisation’s subsistence, improvement and efficient functioning. Debt capital benefits both shareholders and businesses because it boosts shareholder returns while also providing tax benefits to businesses (Barakat, 2014). Moreover financial leverage is a world-wide issue faced by many business organizations. A business firm's optimum debt and equity level must be known by the respective decision committee members and they should accept the challenge present in it to be successful (Al-Tally, 2014). Thus it is important to know the impacts of financial leverage in the Indian Manufacturing Companies. It will help for the proper decision regarding efficient financial management and also for its success.

REVIEW OF LITERATURE

Rajamani (2021) has made a study entitled **“Debt Financing and Financial Performance: Empirical Evidence of Indian SMEs Listed in BSE-SME Platform”.** Panel Data Analysis was applied to study the association between debt and firm performance. The sample includes 164 non-financial Indian small and medium enterprises listed in the Bombay Stock Exchange from 2014 to 2018. The results of the study demonstrate that capital

structure, especially short-term and long-term debt has an adverse effect on the efficiency of small and medium enterprises. The study reveals that decisions on capital structures have little impact on SMEs' financial results.

Ibrahim and Isiaka (2020) have attempted a research on **"Effect of Financial Leverage on Firm Value: Evidence from Selected Firms Quoted on the Nigerian Stock Exchange".** The sample of 18 firms quoted on the Nigerian Stock Exchange was selected over the period 2014-2018 to examine the effect of financial leverage on firm value. Panel Data Analysis results showed that financial leverage has a significantly negative effect on firm value while the result of the Pairwise Correlation showed that there is no significant linear relationship between leverage and firm value.

Deb and Banerjee (2018) have conducted a research entitled **"Low Leverage Policy: a boon or bane for Indian Shareholders"**. This research studies, whether a low leverage policy can create incremental value for shareholders of Indian firms. A sample of 289 non-financial companies listed in both National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) from 1998 to 2014 was considered. Regression and Robustness tests were applied. The study finds that there is a significant increase in the business risk of the low leverage firm.

RESEARCH GAP

- There are countless studies relating only particular aspects like "Determinants of Financial Leverage, Impacts of Financial Leverage on Profitability, on liquidity, on Financial Performance, on Firm value or on Shareholder's Return etc". But the study of financial leverage impact on all together is very few in number especially in Manufacturing Industries in India, as it is the major contributor to the nation's GDP.
- Many studies selected sub-industries under the Manufacturing Industry on the basis of different criteria, but the sub-industry based on FDI equity inflow categorical selection is rare in the Indian Context.
- There are only a few studies which are related to the financial leverage impact on the companies individually. The studies covering both Company wise and Industry wise are also limited in the Indian Context.

This research gap was found out. To fill this research gap, it is imperative to conduct a research study. Hence a research study was conducted on the title "**Impact of Financial Leverage on Financial performance, Firm value and Shareholders' return of Select Manufacturing Companies in India".**

SCOPE OF THE STUDY

The current research study focused on the impact of financial leverage of select Manufacturing companies (Automobile Industry, Chemical Industry and Pharmaceutical Industry). The study shows a clear view of debt practice and how it affects company's performance for each company individually which is greatly helpful for the investor before making an investment decision. The result of this study will be immensely useful for a corporate financial manager to design an optimum capital structure. The financial institutions, creditors and banks will get insight into the debt management and will determine better lending policies for the Indian manufacturing Companies. Therefore the study on the impacts of financial leverage is carried out and it offers wider scope for the growth and development of the Indian Manufacturing Companies, Industry. The research study significantly contributes to the Economic Development of India.

STATEMENT OF THE PROBLEM

In India, the schemes like "Make In India" were implemented to attract Foreign Direct Investment. The Department for Promotion of Industry and Internal Trade report says that (www.ibef.org) the first highest FDI Equity inflow is in Automobile Industry (25.8 Billion), the second ranks Chemical Industry (18.5 Billion) and next to it is Pharmaceutical Industry (18 Billion). These top three industries together contribute more than fifty per cent of FDI equity inflow to the country. By this, it is assumed that they tend to increase or attract a large number of shareholders' investments. If the company use equity alone in its capital structure, then the tax-shield benefit will not be available. Moreover a greater proportion of profit should be distributed to fulfil the needs of a large number of shareholders. So it is necessary to know how the leverage works in these Industries. It is important to maintain a proper mix of debt and equity, which enhances the financial performance of Select Companies in the Indian Manufacturing Industry.

Leverage is a worldwide strategy either for developed countries or developing countries. "Financial Leverage is a Double-edged sword", the returns from the employed capital of owners may increase or shrink. Adding to it, financial leverage is far and wide, the main unsettled problem identified in corporate finance (Brealey and Myers, 1991). Industrial success highly depends on financing decisions. The proper mix of debt and equity, where earnings are higher than the interest, the leverage is beneficial to any business organization. It has various impacts and it is important to know the problematic areas where a firm has to act carefully and handle the problem. The financial leverage impacts on the selected industries in the manufacturing sector are identified as the problem statement.

RESEARCH QUESTIONS

The present research was conducted on "**Impact of Financial Leverage on Financial performance, Firm value and Shareholders' return of Select Manufacturing Companies in India"** based on the following research questions.

Does financial leverage make any impact on the financial performance of the Automobile, Chemical and Pharmaceutical Companies and Industries? Financial leverage and its impact on the firm value of the Automobile, Chemical and Pharmaceutical Companies and Industries. Whether there exists any impact of financial leverage on shareholders' return of the Automobile, Chemical and Pharmaceutical Companies and Industries? Value drivers (Net Profit Margin, Asset Turnover Ratio and Equity Multiplier) contribution to the ROE of the Automobile, Chemical and Pharmaceutical Companies. What will be the intercompany financial leverage growth rate and inter-industry trends of financial leverage?

OBJECTIVES OF THE STUDY

The Following Objectives were framed in order to address the above-mentioned research questions.

- To know the impact of financial leverage on financial performance of Select Indian Manufacturing Companies and Industries.
- To study the impact of financial leverage on the firm value of Select Indian Manufacturing Companies and Industries.
- To examine the impact of financial leverage on shareholders' return of Select Indian Manufacturing Companies and Industries.
- To identify the contribution of value drivers to the ROE of Select Indian Manufacturing Companies.
- To compare the financial leverage of select Indian intercompany and industry of Manufacturing Sector.

RESEARCH HYPOTHESES

The hypotheses framed for the research purpose are as follows,

H_{01}: There is no impact of financial leverage on the financial performance of Select Indian Manufacturing Companies.

H_{02}: There is no impact of financial leverage on the financial performance of Select Indian Manufacturing Industries.

H_{03}: There is no impact of financial leverage on the firm value of Select Indian Manufacturing Companies.

H_{04}: There is no impact of financial leverage on the firm value of Select Indian Manufacturing Industries.

H_{05}: There is no impact of financial leverage on shareholders' return of Select Indian Manufacturing Companies.

H_{06}: There is no impact of financial leverage on shareholders' return of Select Indian Manufacturing Industries.

H_{07}: There is no significant contribution of Net Profit Margin, Asset Turnover Ratio and Equity Multiplier to the ROE of Select Indian Manufacturing Companies.

LIMITATIONS OF THE STUDY

The study waives some of the aspects during collection of data and analysis, as it may cause any distraction for the key framed objectives. The limitations are,

- The study is focused only on the Automobile, Chemical and Pharmaceutical Manufacturing Companies in India.
- The study includes only the Top 10 companies (listed in BSE and NSE) from each selected industry whose data have been available continuously for 15 years.

RESEARCH METHODOLOGY

(a) Period of Study:

The study covers a period of fifteen financial years from 2006-07 to 2020-21.

(b) Sampling Design:

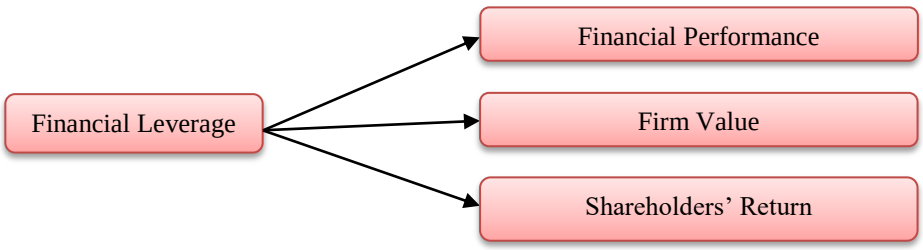
The study covers only Manufacturing Sector in India. The companies under each industry are selected based on the following criteria,

- Ten companies from each industry are selected based on Average Market Capitalization as per AMFI January to June 2021 Report.
- The companies should be listed on both the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) during the study period.
- The companies should have declared dividends continuously for 15 years and also the data available during the financial year 2006-07 to 2020-21.

Accordingly, 10 companies from the Automobile Industry, 10 companies from the Chemical Industry and 10 companies from the Drugs & Pharmaceutical Industry, a total of 30 companies, were selected for the study. These three industries together contribute more than fifty per cent of FDI inflow to the country.

(c) Conceptual Framework:

The Conceptual framework of the proposed study is as follows,



(d) Analytical Tools and Techniques:

Tools and Techniques used for the study includes,

Ratio Analysis, Descriptive Statistics, Multiple Regression Analysis, DUPONT Analysis, Correlation Analysis, Compound Annual Growth Rate, Trend Analysis and Panel Data Regression Analysis

(e) Variables:

Independent Variable:

Financial Leverage- Financial Leverage (FL), Debt Equity Ratio (DER) and Interest Coverage Ratio (ICR).

Dependent Variable:

1. Financial Performance- Liquidity: Current Ratio (CR), Solvency (Leverage): Interest Coverage Ratio (ICR), Activity (Efficiency): Total Asset Turnover Ratio (TATR) and Profitability: Net Profit Ratio (NPR).
2. Shareholders' Return- Return on Equity (ROE), Earnings per Share (EPS), Dividend per Share (DPS), Dividend Yield Ratio (DYR), and Earnings Yield Ratio (EYR).
3. Firm Value- Market value of equity + Market value of debt.

FINDINGS OF THE STUDY

For all the companies Multiple Regression was applied and for all the three Industries Correlation and Panel Data Regression was applied.

I. Impact of Financial Leverage on Financial Performance:

In Automobile Industry, FL and DER was found to be higher in Sundaram Ltd, so its interest coverage ratio automatically declines at a lower rate. Whereas Amara Raja Ltd has higher ICR, and this is due to the lower dependency on debt funds. In chemical industry, FL and DER was found to be lower in Rallis Ltd. But ICR was found to be higher in Tata

Chemicals Ltd. In Pharmaceutical Industry, lower debt (FL) leads to higher coverage Ratio in Lupin Ltd. Similarly higher DER leads to lower ICR in Aarti Drugs Ltd. Overall financial leverage was higher in Automobile and lower in Pharmaceutical Industries.

In Automobile Industry, Financial leverage has no impact on Liquidity (CR). FL and DER has negative relationship and negative impact on Solvency (ICR), Activity (TATR) and Profitability (NPR). But ICR has positive relationship and positive impact on Activity (TATR) and Profitability (NPR). Hence alternative hypothesis is accepted for Automobile Industry (**H_2:** There is an impact of financial leverage on the financial performance (Solvency, Activity and Profitability)). Random Effect Model is fit for CR, ICR and NPR whereas Fixed Effect model is fit for TATR.

Similarly Correlation and Panel Regression Analyses were applied for Chemical and Pharmaceutical Industries also.

II. Impact of Financial Leverage on Firm Value:

As per correlation analysis, there is a negative association between firm value, FL and DER, but ICR has positive relation. Similarly in Panel data regression analysis, increase in FL and DER affects the firm value negatively. Firm value increases with the increase of ICR, as there is positive impact. Hence alternative hypothesis is accepted for Automobile Industry (**H_4:** There is an impact of financial leverage on the firm value). The appropriate model for firm value is Random Effect Model.

III. Impact of Financial Leverage on Shareholders' Return:

As per correlation analysis, FL and DER has negative relationship with ROE, EPS and DPS. But ICR has positive relationship with these variables. Dividend yield (DYR) and Earnings yield (EYR) has no relationship with FL and ICR. In Panel data regression analysis, FL and DER has negative impact on ROE whereas ICR has positive impact on ROE. DER alone has negative impact on EPS and DPS. Hence alternative hypothesis is accepted for Automobile Industry (**H_6:** There is an impact of financial leverage on shareholders' return). FL and ICR have no impact on EPS, DPS, DYR and EYR. The model fit for ROE, EPS, DPS is Random Effect Model and Fixed Effect Model is fit for DYR and EYR.

IV. Significant Contributor of ROE:

In Automobile Industry, ROE was found to be higher in Motherson Sumi Ltd, Balkrishna Ltd and lower in Apollo Tyres Ltd. The companies with the highest value of ROE are efficient in generating growth and income for their shareholders. The lowest ROE held

companies' failure to meet the equity holders' expected earnings may be due to the highest leverage. NPR was found to be the most significant contributor to ROE in majority of the selected companies under all three Industries.

Correlation Analysis shows that there is an association between ROE and its value drivers of all the selected companies. All the value drivers significantly facilitate (positive influence) ROE. EM alone debilitates ROE in few cases. Hence increase in the value drivers' result in increased Return on Equity. So the Alternative hypothesis (**H_7:** There is an significant contribution of Net Profit Margin, Asset Turnover Ratio and Equity Multiplier to the ROE of Select Indian Manufacturing Companies) is accepted for all the select companies.

V. Financial Leverage Inter-company and Inter industry Comparison (CAGR):

Compound Annual Growth Rate result shows that FL shows highly deep negative growth in Minda Ltd (Automobile Industry), Gujarat Alkalis & Chemicals Ltd (Chemical Industry), Dr. Reddy's Ltd and Hester Biosciences Ltd (Pharmaceutical Industry). DER shows negative growth in Apollo Tyres Ltd (Automobile Industry), Sudarshan Chemical Ltd (Chemical Industry) and Dr. Reddy's Ltd (Pharmaceutical Industry). ICR was appreciable in Balkrishna Ltd (Automobile Industry), Excel Industries Ltd (Chemical Industry) and Aarti Drugs Ltd (Pharmaceutical Industry).

Trend analysis result shows that FL was increasing and forecasted to be at 1.953 in Automobile and 1.719 in Pharmaceutical Industry in the year 2026. But in Chemical Industry the FL ratio gradually decreased and forecasted to be at 0.782 in 2026. DER shows negative trend and forecasted to -0.132 in Automobile Industry, -0.122 in Chemical Industry and 0.119 in Pharmaceutical Industry in the year 2026. ICR shows fluctuating trend in both Automobile and Pharmaceutical Industries. But ICR shows an increasing trend in Chemical Industry.

SUGGESTIONS

- The companies can negotiate for low-interest debt, better term payments, amortization schedules etc. It will be of great help to the companies to increase their earnings, efficiency, overall financial performance and firm value.
- The companies should take borrowed funds decision wisely and all the companies are suggested to reduce the debt to a slender portion to avoid the negative impact. Hence higher debt is not recommended.
- The companies' shareholders' return (ROE) can also be increased through reducing labour cost, idle cash distribution and increase of product prices. The asset may be financed by equity funds than leverage funds to overcome the negative effect.

- The companies should be efficient in easy conversion of current asset into cash to meet its short term operations effectively which automatically helps to cover the imposed interest.
- Better management of inventory, increasing sales etc., will also help to increase the turnover from assets which will pave way for the good financial success inspite of its borrowing funds.

CONCLUSION

The Successful Manufacturing Industries in India will accept the challenges of increasing profitability, adopting new technologies, foreign competition and effective utilization of necessary funds. It has to be efficient in the productivity, provide equity holders earnings promptly and play a significant role in developing the Nation's Economy. The financial leverage of all the select Industries is falling negatively and it shows that the increasing equity capital reduces the role of debt. The overall finding is that even though the debt shows negative growth, there present a negative impact. So by reducing the debt to a slender portion, the particular selected Industries can avoid the negative impact. This study helps the decision-makers to wisely decide essential financial management aspects and enable them to build a strong capital structure. The implication of this research is also helpful for promoting a better sustainable way of development in the financial system. The research study gradually improves the manufacturing sector's financial decisions and capital structure decisions. It results in the incredible development of the Indian Economy.

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PUBLICATIONS:

S.no	Article	Journal	Other details Vol/No/Page No /Year	Published in UGC-CARE/ Scopus/ Web of Science
1	Impact of Financial Leverage on Shareholders' Return and Financial Performance: Evidence from Top 100 Listed Companies in National Stock Exchange	Orissa Journal of Commerce ISSN: 0974-8482	Vol: 43 No: 2 Pg: 126 to 143 Year: 2022 April- June	UGC CARE-GROUP I
2	Financial Leverage and Shareholders Return- A study of Indian Automobile Companies	Shodh Sanchar Bulletin ISSN: 2229-3620	Vol: 10 No: 40 Pg: 133 to 137 Year: 2020 October to December	UGC CARE-GROUP I